

Abstract Title

NASA GSFC Space Weather Center - Innovative Space Weather Dissemination: web-interfaces, mobile applications, and more.

Abstract Text

The NASA GSFC Space Weather Center (<http://swc.gsfc.nasa.gov>) is committed to providing forecasts, alerts, research, and educational support to address NASA's space weather needs - in addition to the needs of the general space weather community. We provide a host of services including spacecraft anomaly resolution, historical impact analysis, real-time monitoring and forecasting, custom space weather alerts and products, weekly summaries and reports, and most recently - video casts. There are many challenges in providing accurate descriptions of past, present, and expected space weather events - and the Space Weather Center at NASA GSFC employs several innovative solutions to provide access to a comprehensive collection of both observational data, as well as space weather model/simulation data. We'll describe the challenges we've faced with managing hundreds of data streams, running models in real-time, data storage, and data dissemination. We'll also highlight several systems and tools that are utilized by the Space Weather Center in our daily operations, all of which are available to the general community as well. These systems and services include a web-based application called the Integrated Space Weather Analysis System (iSWA <http://iswa.gsfc.nasa.gov>), two mobile space weather applications for both IOS and Android devices, an external API for web-service style access to data, google earth compatible data products, and a downloadable client-based visualization tool.

Topic

02 Session 2- Innovations and Key Challenges in Space Weather Science

Presentation Type

Oral

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